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O'Connor et al.

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[54] **COOLING SYSTEM FOR THIN PROFILE ELECTRONIC AND COMPUTER DEVICES**

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[57] **ABSTRACT**

An apparatus and method for removing heat from a heat generating component located within a thin-profile consumer electronic or computer system enclosure is disclosed. In one embodiment the cooling system of the present invention includes an air duct comprising a thermally conductive housing having internal fins dispersed along the internal walls of the duct. An air flow generator produces an air flow that is directed from an inlet port located at or near the center of the air duct to first and second exit ports located at opposite ends of the duct. A low resistance thermal path, such as a heat pipe, transfers heat from the heat generating component to the air duct housing.

19 Claims, 9 Drawing Sheets